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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/087,308 | 03/01/2002 | Evren Eryurek | 30203/38232 | 2061 |

4743 7590 06/15/2005

MARSHALL, GERSTEIN & BORUN LLP
233 S. WACKER DRIVE, SUITE 6300
SEARS TOWER
CHICAGO, IL 60606

| EXAMINER | |
|---|---|
| PEREZ DAPLE, AARON C | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2154 | |

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/087,308 | ERYUREK ET AL. | |
| | Examiner | Art Unit | |
| | Aaron C. Perez-Daple | 2154 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *03 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1. This Action is in response to Amendment filed 3/3/05, which has been fully considered.

2. Claims 1-55 are presented for examination.

3. This Action is Final.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 1-6, 8-21, 23-44, and 46-55** are rejected under 35 U.S.C. 103 (a) as being obvious over Spriggs et al. (US 6,421,571 B1) (hereinafter Spriggs) in view of Forney et al. (US 2002/0067370 A1).

6. **Examiner's Interpretation:** The Examiner finds that the claims are obvious in view of Spriggs alone, which teaches or suggests all the limitations of the claimed invention, including a service application implemented by an outside service provider. However, Forney is cited to provide additional support for the rejection. See also Response to Arguments below.

7. As for claim 1, Spriggs discloses a method of collecting and using data within a process plant, comprising:

collecting data from a plurality of data sources within the process plant, wherein the plurality of data sources includes a service application that is implemented by a service provider to the process plant (Figs. 1 and 3; col. 2, lines 12-39);

storing the collected data in a database (database module 80, Fig. 1; col. 2, line 45 – col. 3, line 5);

making the stored data accessible to one or more process control applications or maintenance applications within the process plant (col. 2, line 45 – col. 3, line 5); and

making the stored data accessible to the service application (col. 6, line 49 – col. 7, line 25).

Although Spriggs teaches providing data sources including service applications from an outside (third-party) service provider (col. 6, line 62 – col. 7, line 15), Spriggs does not *explicitly* disclose that the outside service providers may *implement* the service application. However, it is well-known and expected to those in the process and manufacturing arts (and, indeed, in virtually every computer-based art) that certain processes may be "outsourced" to outside service providers who implement the service. Indeed, due to the intricacies of many of these services, the implementation is often included in the purchase of the service or system and performed by experts working for the outside service provider, as would be understood by one of ordinary skill in the art. Forney, for example, teaches using an outside service provider for implementing a service application for collecting data from a plurality of sources within a plant (paragraph 0347). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using an outside service provider for implementing a service application in order to interface effectively with third party

systems, as understood by one of ordinary skill in the art, and in order to provide for an efficient, adaptive interface for user control and monitoring of the system, as taught by Forney (paragraphs 0013-0014).

8. As for claim 2, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a process control data source (col. 6, line 62 – col. 7, line 5).

9. As for claim 3, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a field device maintenance source (col. 2, lines 12-26; col. 6, line 62 – col. 7, line 5).

10. As for claim 4, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a process model (col. 7, lines 16-26).

11. As for claim 5, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a business application (col. 7, lines 16-26).

12. As for claim 6, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is an optimization application (col. 2, lines 12-26; col. 7, lines 16-26).

13. As for claim 8, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is a process performance monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

14. As for claim 9, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is a condition monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

15. As for claim 10, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is a reliability monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

16. As for claim 11, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is an electrical equipment monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

17. As for claim 12, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is device performance monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

18. As for claim 13, Spriggs discloses the method of claim 1 wherein the step of collecting data includes collecting data from a data source that is intermittently communicatively connected to the process plant (portable data collectors; col. 21, lines 64-67).

19. As for claim 14, Spriggs discloses the method of claim 13, wherein the service application data source is intermittently communicatively connected to the process plant (col. 21, lines 64-67).

20. As for claim 15, Spriggs discloses the method of claim 1, wherein the step of storing includes storing the collected data in a single database (database module 80, Fig. 1).

21. As for claim 16, Spriggs discloses a method of performing operations for a process plant having a controller, a plurality of devices and a first computer that implements a first application that is a process control application or a maintenance application used by plant personnel, the method comprising:

collecting first data from the first application as used in the process plant (col. 2, lines 45-56; col. 6, line 49 – col. 7, line 25);

storing the first data in a memory (database module 80, Fig. 1; col. 2, line 45 – col. 3, line 5);

collecting second data from a second application implemented by a service provider associated with the process plant (col. 2, lines 45-56; col. 21, lines 64-67);

providing the second data to the memory storing the second data in the memory (col. 2, line 45 – col. 3, line 5); and

making the second data available from the memory to the first application (col. 6, line 49 – col. 7, line 25; col. 21, lines 64-67).

Although Spriggs teaches providing data-sources including service applications from an outside (third-party) service provider (col. 6, line 62 – col. 7, line 15), Spriggs does not *explicitly* disclose that the outside service providers may *implement* the service application. However, it is well-known and expected to those in the process and manufacturing arts (and, indeed, in virtually every computer-based art) that certain processes may be "outsourced" to outside service providers who implement the service. Indeed, due to the intricacies of many of these services, the implementation is often included in the purchase of the service or system and performed by experts working for the outside service provider, as would be understood by one of ordinary skill in the art. Forney, for example, teaches using an outside service provider for implementing a service application for collecting data from a plurality of sources within a plant (paragraph 0347). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using an outside service provider

for implementing a service application in order to interface effectively with third party systems, as understood by one of ordinary skill in the art, and in order to provide for an efficient, adaptive interface for user control and monitoring of the system, as taught by Forney (paragraphs 0013-0014).

22. As for claim 17, Spriggs discloses the method of claim 16, further including the step of making the first data available from the memory to the second application (col. 6, line 49 – col. 7, line 25).

23. As for claim 18, Spriggs discloses the method of claim 17, wherein the step of collecting first data includes collecting data from a process controller data source (col. 6, line 62 – col. 7, line 5).

24. As for claim 19, Spriggs discloses the method of claim 17, wherein the step of collecting first data includes collecting data from a process model data source (col. 7, lines 16-26).

25. As for claim 20, Spriggs discloses the method of claim 17, wherein the step of collecting first data includes collecting data from a business application (col. 7, lines 16-26).

26. As for claim 21, Spriggs discloses the method of claim 17, wherein the step of collecting second data includes collecting data from a second application that is an optimization application (col. 2, lines 12-26; col. 7, lines 16-26).

27. As for claim 23, Spriggs discloses the method of claim 17, wherein the step of collecting second data includes collecting data from a second application that is a performance monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

28. As for claim 24, Spriggs discloses the method of claim 17, wherein the step of collecting second data includes collecting data from a second application that is device performance monitoring application located within a device (col. 2, lines 12-26; col. 7, lines 16-26).

29. As for claim 25, Spriggs discloses the method of claim 17, wherein the step of collecting second data includes collecting data from a second application that is intermittently communicatively connected to the memory (portable data collectors; col. 21, lines 64-67).

30. As for claim 26, Spriggs discloses the method of claim 17, wherein the steps of storing the first and the second data in the memory includes storing the first and second data in a common memory at a single location (database module 80, Fig. 1).

31. As for claim 27, Spriggs discloses a data communication system within a process plant, comprising:

a first communication network associated with the process plant that uses a first communication protocol (col. 7, lines 6-44);

a first application adapted to communicate via the first communication network (col. 5, line 66 – col. 7, line 10; col. 6, line 49 – col. 7, line 25);

a second communication network associated with the process plant that uses a second communication protocol (col. 7, lines 6-44);

a second application adapted to communicate via the second communication network (col. 5, line 66 – col. 7, line 10; col. 6, line 49 – col. 7, line 25);

a database (database module 80, Fig. 1) communicatively coupled to the first communication network and to the second communication network, said database adapted to receive first data from the first application and second data from the second application, to

store the first data and the second data and to provide the first data to the second application via the second communication network and to provide the second data to the first application via the first communication network (col. 2, line 45 – col. 3, line 15; col. 6, line 49 – col. 7, line 25).

Although Spriggs teaches providing data sources including service applications from an outside (third-party) service provider (col. 6, line 62 – col. 7, line 15), Spriggs does not *explicitly* disclose that the outside service providers may *implement* the service application. However, it is well-known and expected to those in the process and manufacturing arts (and, indeed, in virtually every computer-based art) that certain processes may be "outsourced" to outside service providers who implement the service. Indeed, due to the intricacies of many of these services, the implementation is often included in the purchase of the service or system and performed by experts working for the outside service provider, as would be understood by one of ordinary skill in the art. Forney, for example, teaches using an outside service provider for implementing a service application for collecting data from a plurality of sources within a plant (paragraph 0347). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using an outside service provider for implementing a service application in order to interface effectively with third party systems, as understood by one of ordinary skill in the art, and in order to provide for an efficient, adaptive interface for user control and monitoring of the system, as taught by Forney (paragraphs 0013-0014).

32. As for claim 28, Spriggs discloses the data communication system of claim 27, wherein the first application or the second application is adapted to be intermittently connected to the first or the second communication network (portable data collectors; col. 21, lines 64-67).

33. As for claim 29, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a process performance application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

34. As for claim 30, Spriggs discloses the data communication system of claim 27, wherein the first application is a device maintenance application and the second application is an optimization application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

35. As for claim 31, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is an optimization application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

36. As for claim 32, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a business application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

37. As for claim 33, Spriggs discloses the data communication system of claim 27, wherein the first application is a process performance monitoring application and the second application is a device maintenance application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

38. As for claim 34, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a power equipment monitoring application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

39. As for claim 35, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a rotational equipment analysis application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

40. As for claim 36, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a device diagnostic application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

41. As for claim 37, Spriggs discloses a data communication system within a process plant, comprising:

a database adapted to store a plurality of different types of data (database module 80, Fig. 1; col. 2, line 45 – col. 3, line 5); and

a plurality of applications communicatively coupled to the database via different communication networks, the plurality of applications including two or more of a process control application, a process performance monitoring application, a process device monitoring application and a business application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25; Fig. 3);

wherein each of the plurality of applications are adapted to send data to the database to be stored and at least one of the plurality of applications is adapted to access data from the database that was sent to the database via another one of the applications (col. 2, line 45 – col. 3, line 15; col. 6, line 49 – col. 7, line 25).

Although Spriggs teaches providing data sources including service applications from an outside (third-party) service provider (col. 6, line 62 – col. 7, line 15), Spriggs does not *explicitly* disclose that the outside service providers may *implement* the service application.

However, it is well-known and expected to those in the process and manufacturing arts (and, indeed, in virtually every computer-based art) that certain processes may be "outsourced" to outside service providers who implement the service. Indeed, due to the intricacies of many of these services, the implementation is often included in the purchase of the service or system and performed by experts working for the outside service provider, as would be understood by one of ordinary skill in the art. Forney, for example, teaches using an outside service provider for implementing a service application for collecting data from a plurality of sources within a plant (paragraph 0347). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using an outside service provider for implementing a service application in order to interface effectively with third party systems, as understood by one of ordinary skill in the art, and in order to provide for an efficient, adaptive interface for user control and monitoring of the system, as taught by Forney (paragraphs 0013-0014).

42. As for claim 38, Spriggs discloses the data communication system of claim 37, wherein two or more of the plurality of applications are adapted to access data from the database sent to the database via different ones of the applications (col. 2, line 45 – col. 3, line 15; col. 6, line 49 – col. 7, line 25).

43. As for claim 39, Spriggs discloses the data communication system of claim 37, further including the plurality of communication networks coupled to the database and wherein the each of the plurality of applications communicates with the database via a different one of the plurality of communication networks (col. 8, lines 19-57).

44. As for claim 40, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is an optimization application (col. 2, lines 12-26; col. 7, lines 16-26).

45. As for claim 41, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a process performance monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

46. As for claim 42, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a device performance monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

47. As for claim 43, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a power equipment monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

48. As for claim 44, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a rotational equipment analysis application (col. 2, lines 12-26; col. 7, lines 16-26).

49. As for claim 46, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a reliability monitoring application (col. 2, lines 12-26; col. 7, lines 16-26).

50. As for claim 47, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is intermittently communicatively connected to database (portable data collectors; col. 21, lines 64-67).

51. As for claims 48-55, Spriggs inherently includes expressing the data in a descriptive language, because otherwise the data could not be displayed on a unified graphical user interface. However, Spriggs does not explicitly teach that the descriptive language may be XML. Forney teaches using XML as a descriptive language for expressing data collected from data sources in a plant (paragraph 0037). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using XML in order to efficiently and adaptively display data collected from multiple sources in a plant, as taught by Forney (paragraphs 0013-0014).

52. **Claims 7, 22 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Spriggs in view of Hays et al. (US 5,855,791) (hereinafter Hays).

53. As for claims 7, 22 and 45, although Spriggs discloses that any of a variety of monitoring applications may be integrated with the system, Spriggs does not explicitly teach a corrosion monitoring application. Hays teaches the use of a corrosion monitoring application for controlling the performance of a cooling system (col. 4, line 66 – col. 5, line 3; col. 13, lines 16-28). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using a corrosion monitoring application in order to control the performance of a cooling system, as taught by Hays above.

***Response to Arguments***

54. Applicant's arguments with respect to claims 1-55 have been considered but are moot in view of the new ground(s) of rejection.

The Examiner notes, however, that the passage cited from Applicant's specification in support of using an outside service provider for implementing a service application actually constitutes admitted prior art. Specifically, pg. 11, line 23 – pg. 12, line 5, recites subject matter already admitted as prior art in pg. 5, lines 15-21. Applicant has admitted that it is well-known to use outside service providers for implementing a service application in a plant. Moreover, the fact that *outside* service providers were available at all to perform the service at the time of the invention constitutes an implicit admission that this was well-known in the art. Therefore, the modification to Spriggs would also have been obvious in view of Applicant's admitted prior art for the purpose of integrating all plant data into a single graphical user interface, which is the objective of Spriggs.

***Conclusion***

55. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

56. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron C. Perez-Daple whose telephone number is (571) 272-3974. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/9/05

Aaron Perez-Daple

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100